



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,847	02/10/2006	Masao Yamamoto	524168-0325792(SUZ0026-US	7332

909 7590 05/08/2008

PILLSBURY WINTHROP SHAW PITTMAN, LLP

P.O. BOX 10500

MCLEAN, VA 22102

EXAMINER

LIU, MICHAEL

ART UNIT

PAPER NUMBER

2851

MAIL DATE

DELIVERY MODE

05/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/567,847

Applicant(s)

YAMAMOTO, MASAO

Examiner

Michael Liu

Art Unit

2851

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-11 is/are allowed.
- 6) ☒ Claim(s) 2-7, 12-18 and 20-22 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Receipt is acknowledged of the Amendment filed 2/22/08. Claims 2, 5-12, 15, and 20-22 have been amended, and claim 1 has been canceled by this amendment.

Specification

2. The corrections to the title have been considered. As a result, the previous specification objection has been withdrawn.
3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because of containing two paragraphs and too many words. Correction is required. See MPEP § 608.01(b).
5. The disclosure is objected to because of the following informalities:
 - a. In Par 0027, "In these case" should be changed to --In these cases--.
 - b. In Par 0043, the word "belew" is misspelled.
 - c. In Par 0047, "Said a plurality of subject surface segments" needs to be changed to --Said plurality of subject surface segments--.

- d. In Par 0084, "is used described below" is grammatically incorrect and should be changed to --is used is described below--.
 - e. In Par 0118, "displayed achromatic color" should be changed to --displayed in achromatic color--.
- Appropriate correction is required.
6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

7. The corrections to the previous claim objections have been considered, and the previous claim objections have been withdrawn.
8. The claims are objected to because of the following informalities:
- a. In claims 2-6, 12-17, 20, and 21, the phrase "same kind of said elements" does not make sense. Is this referring to the different kinds of elements? If that were the case, then how would it be possible to have the same kind of different kinds of elements? Appropriate correction is required. This phrase, for examining purposes, has been interpreted as "different kinds of elements".
 - b. In claims 2, 7-12, and 20-22, the instances of "imaging lights" should be changed to --reflected lights-- to remove ambiguity with the initial imaging light. Additionally, "to light in different wavelengths" should be changed to --to the imaging light in different wavelengths-- to show antecedent basis. Moreover,

Art Unit: 2851

"having wavelength identical" should be changed to --having a wavelength identical--.

c. In claims 2, 7, 8, 12, 20, and 21, all instances of "said signal" should be changed to --said predetermined signals-- for more clarity.

d. In claim 2, the instance of "image data" in the final paragraph needs a --said-- prefacing the phrase to show antecedent basis.

e. In the last line of claims 7 and 8, "a predetermined display" already has antecedent basis. It should be changed to --the predetermined display--.

f. In claim 10, "adjacent subject surface segment" is plural and needs to be changed accordingly.

g. In the last line of claim 11, "from" is a typo that should be --form--.

h. In line two of claim 22, "a the photosensitive surface" needs to be fixed by removing the "the" in above phrase.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 2, 7-12, and 20-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably

Art Unit: 2851

convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The recitation in all of the independent claims of "while said photosensitive surface is stationary" is not disclosed in the specification or in the drawings. The application is silent and does not suggest that the photosensitive surface would be stationary. In fact, the photosensitive surface 134A, which is a part of the camera body 130 as seen in Fig 1, can be moved by rotating a knob 132 [see Par 0070].

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 2-7, 12-18, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boehm et al (2003/0095328) in view of Wihl et al (6,917,421).

Re claims 2, 12, 20, and 21: Boehm discloses a camera 9 comprising: an objective lens 37 where an imaging light 17 and 19 enters; image pickup means 49 having a photosensitive surface [Par 0033: photomultiplier] that receives the imaging light directed after being passed through said objective lens to form an image, the photosensitive surface generates predetermined signals [Par 0033: electrical detected signals] in response to the imaging light in different wavelengths [Par 0033: "a first illuminating light beam 17 which has a first wavelength, and...a second illuminating light beam 19 which has a second wavelength"]; and image processing means 51 for

generating image data that are used to produce, on a predetermined display 59, an image 55 and 57 taken by said image pickup means according to received said predetermined signals to send them to the outside,

said objective lens being adapted to receive reflected lights 45 from each of a plurality of subject surface segments 41 and 43 located at different depths from said photosensitive surface and form an image on said photosensitive surface using chromatic aberration [inherent; acknowledged in Par 0009], while said photosensitive surface is stationary, each of the reflected lights 17 and 19 having a wavelength identical to one of said different wavelengths and being different from each other.

Boehm does not disclose expressly the photosensitive surface having different kinds of elements arranged in an array. Moreover, Boehm does not disclose expressly said image processing means being adapted to generate, according to said predetermined signals generated by said different kinds of elements, said image data with which the same number of a plurality of images produced by the same kind of said elements are provided as the number of said elements.

Wihl teaches different kinds of elements [multiple collectors 32] arranged in an array [Fig 4a: multiple collectors 32 are in an arrangement that constitutes an array], each element used for each focal plane scanned [C9L36-48]. Additionally, there exists the same number of images, which is two, as there are different kinds of elements, which is also two, as depicted in Fig 4a.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to recognize that the detector 49 has different kinds of elements,

for the purpose of interpreting light of different wavelengths to ensure an accurate display.

Re claims 3 and 13: Boehm discloses wherein said image processing means 51 is adapted to generate said image data with which said plurality of images generated by the same kind of said elements can be produced as separated images 55 and 57 on the predetermined display 59.

Re claims 4 and 14: Boehm discloses wherein said image processing means is adapted to generate said image data with which all of said plurality of images 55 and 57 generated by the same kind of said elements can be produced at the same time on the predetermined display 59 [see Fig 1].

Re claims 5 and 15: Boehm discloses wherein said image processing means 51 is adapted to generate said image data with which any of said plurality of images [55 or 57] generated by the same kind of said elements can be selectively produced on the predetermined display 59 [see Fig 1].

Re claims 6 and 16: Boehm discloses wherein said image processing means is adapted to generate said image data with which a single image 61 that is formed according to said plurality of images 55 and 57 generated by the same kind of said elements can be produced on the predetermined display 59.

Re claim 7: Boehm discloses a camera 9 comprising: an objective lens 37 where an imaging light 17 and 19 enters; image pickup means 49 having a photosensitive surface [Par 0033: photomultiplier] that receives the imaging light directed after being passed through said objective lens to form an image, the

photosensitive surface generates predetermined signals [Par 0033: electrical detected signals] in response to the imaging light in different wavelengths [Par 0033: "a first illuminating light beam 17 which has a first wavelength, and...a second illuminating light beam 19 which has a second wavelength"]; and image processing means 51 for generating image data that are used to produce, on a predetermined display [top right of display 59], an image 55 taken by said image pickup means according to received said predetermined signals to send them to the outside,

said objective lens being adapted to receive reflected lights 45 from each of a plurality of subject surface segments 41 and 43 located at different depths from said photosensitive surface and form an image on said photosensitive surface using chromatic aberration [inherent; acknowledged in Par 0009], while said photosensitive surface is stationary, each of the reflected lights 17 and 19 having a wavelength identical to one of said different wavelengths and being different from each other.

Boehm does not disclose expressly the photosensitive surface having different kinds of elements arranged in an array. Moreover, Boehm does not disclose expressly said image processing means being adapted to generate, according to said predetermined signals generated by said different kinds of elements, said image data with which the same number of a plurality of images produced by the same kind of said elements are provided as the number of said elements.

Wihl teaches different kinds of elements [multiple collectors 32] arranged in an array [Fig 4a: multiple collectors 32 are in an arrangement that constitutes an array], each element used for each focal plane scanned [C9L36-48]. Additionally, there exists

the same number of images, which is two, as there are different kinds of elements, which is also two, as depicted in Fig 4a.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to recognize that the detector 49 has different kinds of elements, for the purpose of interpreting light of different wavelengths to ensure an accurate display.

Re claim 17: Boehm discloses wherein said processing means is adapted to allow production of an image 61 on said display 59, the image being generated by converting said plurality of images 55 and 57 generated by the same kind of said elements and then overlapping them [superimposed image 61].

Re claim 18: Boehm discloses wherein said processing means 51 is adapted to generate, according to said signal generated by said different kinds of elements, said image data with which images 55 in colors of only the same hue [Par 0033: first fluorochrome] can be produced on said display.

Re claim 22: Boehm discloses an objective lens 37 used in combination with a camera 9 comprising image pickup means 49 having a photosensitive surface [Par 0033: photomultiplier] generating predetermined signals [Par 0033: electrical detected signals] in response to the imaging light in different wavelengths [Par 0033: "a first illuminating light beam 17 which has a first wavelength, and...a second illuminating light beam 19 which has a second wavelength"], the objective lens being disposed so that the imaging light directed therethrough is received by said image pickup means to form an image,

the objective lens being adapted to receive reflected lights 45 from each of a plurality of subject surface segments 41 and 43 located at different depths from said photosensitive surface and form an image on said photosensitive surface using chromatic aberration [inherent; acknowledged in Par 0009], each of the reflected lights having a wavelength identical to one of said different wavelengths and being different from each other.

Boehm does not disclose expressly the photosensitive surface having different kinds of elements arranged in an array.

Wihl teaches different kinds of elements [multiple collectors 32] arranged in an array [Fig 4a: multiple collectors 32 are in an arrangement that constitutes an array], each element used for each focal plane scanned [C9L36-48].

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to recognize that the detector 49 has different kinds of elements, for the purpose of interpreting light of different wavelengths to ensure an accurate display.

Allowable Subject Matter

13. Claims 8-11 are allowed.
14. Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
15. Below is a statement of reasons for the indication of allowable subject matter:

Re claims 8 and 19: There is no prior art that discloses, in combination with all the other claimed limitations, said image data with which achromatic images can be produced on the predetermined display.

Response to Arguments

16. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. See the above 103 rejections.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Liu whose telephone number is 571-272-9019. The examiner can normally be reached on Monday through Friday 9 am - 5 pm EST.

Art Unit: 2851

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on 571-272-2399.

Michael Liu
Examiner
Art Unit 2851

ML 5/6/08

/Diane I Lee/
Supervisory Patent Examiner, Art Unit 2851